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Filed : April 13, 2001

### REMARKS

In the Office Action mailed May 27, 2003, the Examiner rejected all pending claims, Claims 8-9 and 11-15. Applicants request full consideration of the remarks contained herein.

#### Rejections Under 35 U.S.C. § 103

The Examiner has rejected Claims 8-9 and 13-15 under 35 U.S.C. § 103 as being unpatentable over Muka (U.S. Pat. No. 6,079,927) in view of Cheng (U.S. Pat. No. 6,164,894) and Allen (U.S. Pat. No. 6,213,708 B1). The Examiner has also rejected Claim 11 in view of Muka, Cheng and Allen and further in view of Rush et al. (U.S. Pat. No. 5,193,969) and Claim 12 in view of Muka, Cheng and Allen and further in view of Garric et al. (U.S. Pat. No. 5,388,945).

Initially, Applicants note that independent Claims 8, 13 and 15 each recite the following elements, either explicitly in a device claim (Claim 8) or in methods (Claims 13 and 15) specifying movement of and interactions between the elements: a cassette store for holding wafer cassettes, a sealable chamber, a cassette handling device for moving a cassette from the store to an opening in the sealable chamber, a measuring station for measuring wafers, and a wafer-handling device for performing a wafer sorting function. The wafer-handling device is in the sealable chamber and the measuring station is connected to the sealable chamber. The opening in the sealable chamber allows open communication between the chamber and the wafers inside one or more cassettes at one or more openings to the chamber. These recited interactions or interrelations effectively define a combination in which all three of the measuring station, the cassette store and the sorting functions are combined in one area.

In view of these elements, the Examiner stated that Muka teaches a cassette store, a sealable chamber, a cassette-handling device, and the use of these elements, but does not teach a measuring station or a wafer-handling device for performing a wafer sorting function. To satisfy these deficiencies, the Examiner stated that Cheng teaches a measuring station and its use and that Allen teaches a wafer transfer device that sorts wafers. As a motivation to combine these references, the Examiner stated that "[i]t would have been obvious to one of ordinary skill in the art, at the time of the invention to provide the measuring station capabilities as taught by Cheng and the sorting capabilities taught by Allen to the device taught by Muka in order to allow the

device to test wafers and to sort them after testing in order to keep the process station from processing defective wafers, thereby increasing the throughput of the system by avoiding the processing of defective wafers.” The Examiner further stated that it would have been obvious to “test the wafers automatically after processing, therein making the process faster and more precise” and that it would have been obvious to “sort the wafers into various groups based upon their being defective or operable.”

Applicants traverse the rejections and submit that the pending claims are patentably distinct.

**A. The Examiner Has Not Provided a Suggestion From the Prior Art to Combine the References**

Applicants note initially that in order to establish a *prima facie* case of obviousness based upon a combination of references, the *prior art* must provide a suggestion to combine the references. *See In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991) (To establish a *prima facie* case of obviousness, a suggestion to combine references must be founded in the prior art, not in the applicant’s disclosure.).

In this case, however, the Examiner has not pointed to any teaching in the prior art that suggests combining Muka, Cheng and Allen. In particular, the Examiner has stated that the art of record teaches particular elements of the claims, but appears to acknowledge that the art of record does not teach more than these isolated, discrete elements. Rather, the only asserted suggestion to combine is provided entirely by the Examiner himself and is given without any support from the art of record and without pointing to any authority in the prior art as a basis for the Examiner’s asserted rationale, other than that the recited elements exist in the prior art. It is well-established, however, the Examiner’s subjective rationale for combining references is not a permissible substitute for the requisite evidence from the prior art. *See In re Lee*, 61 U.S.P.Q.2d 1430 (Fed. Cir. 2002) (the “factual question of motivation is material to patentability, and could not be resolved on subjective belief and *unknown authority* ... ‘Common knowledge and common sense,’ even if assumed to derive from the agency’s expertise, do not substitute for authority when the law requires authority.”) (emphasis added); *see also* M.P.E.P. § 2143.01 (“the mere fact that references can be combined or modified does not render the resultant combination obvious, unless the prior art also

suggests the desirability of the modification.”). Because the asserted suggestion to combine is not supported by any teaching in the prior art, however, Applicants submit that the Examiner has failed to establish a *prima facie* case of obviousness.

Moreover, Applicants submit that, prior to the present Application, the individual, discrete elements taught by the art of record were just that, individual, discrete elements; Applicants submit that the only source suggesting the asserted combination is the Application itself. While in hindsight the combination of these elements has resulted in an advantageously simple and efficient device and methods for sorting and assembling wafers, the advantage of simplicity and exceptional utility supports, and does not cut against, the patentability of the claims. Applicants note that *In re Rouffet*, 47 U.S.P.Q.2d 1453, 1457-58 (Fed. Cir. 1998), is particularly instructive in this regard:

The suggestion to combine requirement stands as a critical safeguard against hindsight analysis and rote application of the legal test for obviousness ... virtually all [inventions] are *combinations of old elements* ... If identification of each claimed element in the prior art were sufficient to negate patentability, very few patents would ever issue.

(emphasis added); *see also In re Dembiczak*, 50 U.S.P.Q.2d 1614, 1617-18 (Fed. Cir. 1999) (“Close adherence to [the requirements of section 103] is especially important in the case of less technologically complex inventions, where the very *ease with which the invention can be understood* may prompt one ‘to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher.’”) (emphasis added). Thus, rather than being motivated by a suggestion in the prior art, Applicants submit that the Examiner has impermissibly made the asserted combination based upon hindsight gained from an understanding of the claimed invention. *See In re Gorman*, 933 F.2d 982, 18 U.S.P.Q.2d 1885 (Fed. Cir. 1991) (“It is impermissible, however, simply to engage in a hindsight reconstruction of the claimed invention, using the applicant’s structure as a template and selecting elements from references to fill the gaps.”). Applicants stress again, however, that the art of record does not provide any suggestion to make the combination recited in independent Claims 8, 13 and 15.

**B. Even If Permissible, the Asserted Combination Does Not Teach All Elements of the Claims**

Assuming, *arguendo*, that the asserted combination of Muka, Cheng and Allen is proper, Applicants submit that the asserted combination does not teach all limitations of the pending claims. In particular, Applicants note that the claims recite not only particular elements, but also a particular arrangement of these elements with each other. *See In re Kotzab*, 55 U.S.P.Q.2d 1313, 1318 (Fed. Cir. 2000) ("particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination *in the manner claimed*." ) (emphasis added).

Applicants note that each of independent Claims 8, 13 and 15 recite a sealable chamber that: 1) contains the wafer-handling device which performs the sorting function, 2) allows open communication with wafers in at least two cassettes and 3) is connected to a measuring station. The Examiner's asserted suggestion to combine, however, only states that providing the measuring capabilities as taught by Cheng and the sorting capabilities taught by Allen to the device taught by Muka increase processing speed and avoid processing of defective wafers. *See* the Office Action, May 27, 2003, pp. 3-4. This suggests that it may be desirable to provide measuring capabilities and sorting capabilities for use with Muka's device, but the Examiner has not shown any suggestion that the sorting capabilities should be placed inside a sealable chamber, or that the measuring station should be connected to this chamber, or that at least two cassettes should be open to the sealable chamber to allow for directly sorting the wafers of those cassettes within the chamber. In other words, even assuming the Examiner's asserted suggestion could be found in the prior art, this would at most suggest using all of Cheng, Allen and Muka's devices individually. Such use would not meet Applicants' claims with the specifically recited interrelationship among these elements.

The art of record also does not satisfy this deficiency. Allen only teaches a wafer sorter, Cheng only teaches a measuring station and Muka teaches only a cassette store and transfer mechanism. None of the references teach any particular relationship to the functions of the other references. Muka, for example, provides no indication how either a wafer sorter or a measuring station should interface with its cassette store and transfer mechanism. Thus, Applicants submit that, even if combined, the asserted combination does not disclose every limitation of Claims 8,

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13 and 15. In particular, the asserted combination does not teach or disclose the claimed sealable chamber and the particular relationship of the measuring station, wafer-sorting device and wafer cassettes with such a chamber.

Rather, Applicants submit that a central chamber containing a wafer-handling device for sorting, connected to a measuring station and permitting direct transfer of wafers through the chamber from one cassette to another cassette is shown only in the present Application. Moreover, it is Applicants that have taught and claimed such a chamber and such an advantageous interrelationship of the various elements discussed above to efficiently sort wafers while also ensuring high purity levels. Applicants submit that the art of record does not teach or suggest the advantageous arrangement of elements recited in independent Claims 8, 13 and 15.

Accordingly, Applicants submit that the pending claims are allowable over the art of record. Applicants have not addressed the further rejections of dependent claims as being moot in view of the amendments and remarks herein. However, Applicants expressly do not acquiesce in the Examiner's findings not addressed herein. Indeed, Applicants submit that the dependent claims recite further novel and non-obvious features of particular utility.

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**CONCLUSIONS**

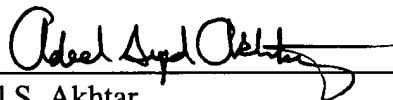
In view of the foregoing remarks, Applicants respectfully submit that the application is in condition for allowance and request the same. If some issue remains that the Examiner feels may be addressed by Examiner's amendment, the Examiner is invited to call the undersigned for authorization.

Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410.

Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

Dated: September 26, 2003

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